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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Cancelled)

Claim 2 (Currently Amended) A circuit pattern inspection method of inspecting a pattern shape on the basis of two-dimensional distribution information of intensities of secondary electrons or reflected electrons obtained by observing a pattern formed on a substrate by a scanning microscope using a charged particle beam, comprising:

a step of detecting a set of edge points indicative of positions of line edges of said pattern in a two-dimensional plane from said two-dimensional distribution information by a threshold method;

a step of obtaining an approximation line for the set of edge points detected for each line edge by least square;

a step of obtaining an edge roughness shape by calculating the difference between the set of said edge points belonging to each line edge and said approximation line; and

a step of displaying correlation between edge roughness shapes of different line edges.

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Claim 3 (Currently Amended) The circuit pattern inspection method according to claim 12, wherein a plurality of values are used as thresholds used for said threshold method.

Claim 4 (Original) The circuit pattern inspection method according to claim 3, further comprising a step of calculating a spatial frequency distribution of said edge roughness shape obtained.

Claim 5 (Currently Amended) The circuit pattern inspection method according to claim 3, further comprising a step of obtaining the degree of said edge roughness by calculating a standard deviation expressed by the square root of an average of root-mean-square values of the differences each between the set of said edge points derived with respect to said plurality of thresholds and said approximation line.

Claim 6 (Currently Amended) The circuit pattern inspection method according to claim 3, further comprising a step of selecting a candidate of a process of forming a pattern of said substrate, which causes occurrence of roughness from said edge roughness shape obtained, and displaying the candidate.

Claim 7 (Original) A circuit pattern inspection method comprising:
a step of mounting a sample processed in a line pattern shape at a predetermined pitch on a scanning microscope, observing said sample, and

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obtaining a two-dimensional intensity distribution of secondary electrons or reflected electrons;

a step of calculating a shape of roughness of an edge of said line pattern from said two-dimensional intensity distribution; and

a step of storing said edge roughness shape obtained as image distortion information.

Claim 8 (Original) A circuit pattern inspection method comprising:

a step of mounting a sample processed in a line pattern shape at a predetermined pitch on a scanning microscope, observing said sample, and obtaining a first two-dimensional intensity distribution of secondary electrons or reflected electrons;

a step of moving an observation position in the direction of a side of said line pattern only by a predetermined length and obtaining a second two-dimensional intensity distribution of secondary electrons or reflected electrons;

a step of computing a sum of said first and second two-dimensional intensity distributions;

a step of calculating a shape of roughness of an edge of said line pattern from said sum data; and

a step of storing said edge roughness shape obtained as image distortion information.

Claim 9 (Original) The circuit pattern inspection method according to claim 8, further comprising a step of calculating an image offset amount in the direction

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perpendicular to an edge of a line pattern in an observation area from said image distortion information obtained and correcting a third two-dimensional intensity distribution of secondary electrons or reflected electrons obtained as a result of observing an arbitrary sample or a pattern edge position obtained from said third two-dimensional intensity distribution.

Claim 10 (Original) A circuit pattern inspection method of inspecting a pattern shape on the basis of two-dimensional distribution information of intensities of secondary electrons or reflected electrons obtained by observing a pattern formed on a substrate by a scanning microscope using a charged particle beam, comprising:

- a step of detecting a set of edge points indicative of positions of edges of said pattern in a two-dimensional plane from said two-dimensional distribution information by a threshold method;

- a step of obtaining an approximation line for the set of edge points belonging to said edge detected;

- a step of obtaining an edge roughness shape by calculating the difference between the set of said edge points and said approximation line; and

- a step of selecting a candidate of a pattern forming process on said substrate as a cause of occurrence of roughness from said edge roughness shape obtained and displaying the candidate,

wherein a plurality of values are used as thresholds used for said threshold method.

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Claim 11 (Cancelled)